

CLAIMS

What is claimed is:

1. A method of coating an implantable device, comprising:
adjusting the temperature of the implantable device to a temperature other than ambient temperature; and
applying a coating substance to the implantable device.
2. The method of Claim 1, wherein the implantable device is a metallic stent.
3. The method of Claim 1, wherein adjusting comprises increasing the temperature of the implantable device.
4. The method of Claim 1, wherein the coating substance includes a polymer dissolved in a fluid and optionally an active agent.
5. A method of coating an implantable device, comprising the acts of:
applying a composition including a fluid to an implantable device; and
directing a gas onto the implantable device to induce evaporation of the fluid from the composition to form a coating on the implantable device.
6. The method of Claim 5, additionally comprising repeating the acts of applying and directing to form a coating of a desirable thickness or weight.

7. An implantable device coated in accordance with the method of Claim 5.
8. The method of Claim 5, wherein the act of applying comprises spraying the composition onto the implantable device.
9. The method of Claim 8, wherein the act of spraying is performed at a flow rate of about 0.01 mg/sec to about 1 mg/sec.
10. The method of Claim 8, wherein the act of spraying is performed for a duration of about 0.5 seconds to about 5 seconds.
11. The method of Claim 5, wherein the temperature of the gas is about 25°C to about 200°C.
12. The method of Claim 5, wherein the act of directing is performed for a duration of about 1 second to about 100 seconds.
13. The method of Claim 5, wherein the act of directing is performed at a flow speed of about 0.01 m³/second to about 1.42 m³/second.
14. The method of Claim 5, wherein the composition includes a polymer dissolved in the fluid and optionally an active agent.
15. The method of Claim 14, wherein the active agent is actinomycin D, paclitaxel, docetaxel, or rapamycin.

16. The method of Claim 5, wherein the composition additionally includes a radiopaque element or a radioactive isotope.

17. The method of Claim 5, additionally comprising rotating the implantable device about the longitudinal axis of the implantable device.

18. The method of Claim 5, additionally comprising moving the implantable device in a linear direction along the longitudinal axis of the implantable device.

19. The method of Claim 5, wherein the implantable device is a stent.

20. The method of Claim 19, wherein the stent is at least partially expanded during the acts of applying and directing.

21. The method of Claim 5, additionally comprising prior to the act of applying:

heating the implantable device, wherein the composition is applied to the warm implantable device.

22. A method of coating a stent, comprising the acts of:

spraying onto a stent a composition including a solvent, a polymer dissolved in the solvent, and optionally an active agent;

applying a warm gas onto the stent to remove the solvent from the composition and form a coating on the stent.

23. The method of Claim 22, additionally comprising repeating the acts of spraying and applying to form a coating of a desirable thickness or weight.

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